

Southern Pacific Railroad MW208

Rotary Snowplow

Among the most daunting problems faced by mountain railroads is that of snow. The Southern Pacific's line over Donner Pass in particular is famous for its wet, heavy snowfall and the havoc it can visit upon train operations. The snow itself is so difficult to deal with that crews long ago nicknamed it "Sierra Cement". Track covered by snowsheds, locomotive pushed plows and mechanical bulldozers are all tools in the fight to keep the rails open. However, when Mother Nature decides to unleash her worst storms, the roadmaster calls upon the most spectacular snow equipment available: the rotary plow.

SP MW208, built as a steam powered plow in 1927, is a design based on the most common and successful style of rotary plow, the so-called Leslie Patent plows, developed by Canadian Orange Jull in 1883. First manufactured by the Leslie Brothers Machine Company, just after the turn of the century the rights for their design were sold to the American Locomotive Company. While other designs were also built, those created by Leslie and ALCo were by far the most numerous and successful, even copied by other companies and continuing in use today. In a Leslie style plow, the large cutting disk at the front of the unit is rapidly spun by a large motor in the carbody. It "chews" its way into the snow and ice, breaking it up and blowing it out the chutes at the top of the rotary opening, ejecting the snow far from the tracks. Many plows feature extendable wings that funnel more snow into the mouth and clear a wider path, however SP MW208 lacks these extended wings and was kept as a straight wing plow for tight clearance work during its career.

Beginning in the late 1950s, the Southern Pacific began converting its steam powered rotaries into electrically powered units, installing large electric motors in the carbody and providing power using an old streamlined style freight locomotive that was permanently assigned to each plow. In this new service, these locomotives became known as "Snails". Unable to move itself, each plow/snail combo would be pushed by several locomotives. SP MW208 was the last of the company's rotaries to be converted to diesel, losing its boilers in 1970.

SP MW208 (then numbered 7208) was one of the rotary snowplows involved in the rescue of the trapped *City of San Francisco* passenger train in January, 1952. Part of a two plow set that worked down Donner Pass from the SP terminal at Norden, California, the 7208 was caught in a snowslide along with the second plow and the steam locomotive pushing them toward the train. Later, a second, larger avalanche hit and this huge machine and its tender turned over, killing engineer Rolland "Rolly" Raymond who was outside near the tender. Another SP worker, Jay Gold, died of a heart attack due to the stress of his efforts, but they were the only casualties of the incident which had over 200 people trapped on the train for several days and hundreds more working in the blizzard to free them.

MW208 was loaned to other railroads in the late 1960s and early 70s, including 10 days in northern Arizona on the Santa Fe Railway in December 1967 and use on the McCloud River Railway in March 1969. After it was rebuilt to diesel power, the MW208 was the last rotary to work on the Western Pacific Railroad, having been leased from the SP in 1974.

builder

American Locomotive Co.
- Brooks Works

built

September, 1927

type

Leslie Patent Rotary
Snowplow

tour.wplives.org/spmw208

serial number

67429

original cost

\$16,641.00

operating weight

263,800 lbs

acquisition

donated by Union Pacific

